

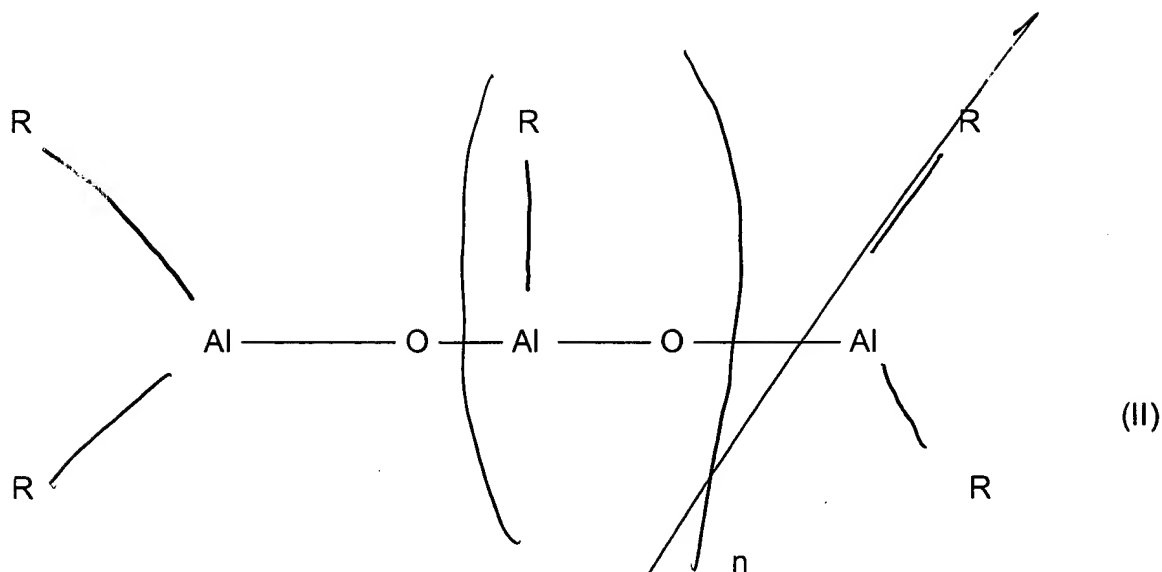
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-- 17. A process for the preparation of a polyolefin molding composition comprising at least two polyolefinic components, wherein the composition is characterized by a broad, bimodal or multimodal melting range in the DSC spectrum (heating/cooling rate 20° C/min), wherein the melting point of the lower melting component is lower than any melting point of the composition, the melting range maximum is between 120 and 165°C, the half-intensity width of the melting peak is broader than 10°C and the width determined at quarter peak height is greater than 15°C, wherein such process comprises the direct polymerization of propylene or copolymerization of propylene with olefins of the formula $R^aCH = CHR^b$, in which R^a and R^b are identical or different and are a hydrogen atom or an alkyl radical having 1 to 14 carbon atoms, or R^a and R^b , together with the atoms connecting them, can form a ring,

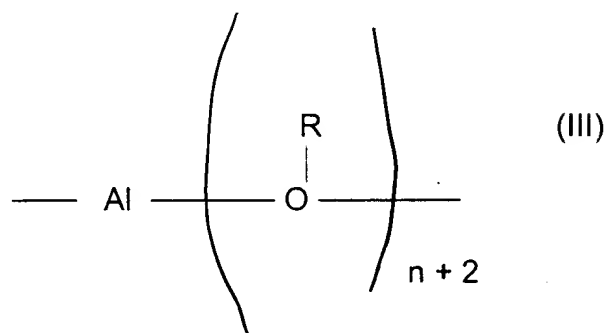
to at least two polyolefins of different melting points, wherein the melting points of the polyolefins must differ by at least 5° C, and wherein the polymerized is carried out at a temperature of from -60 to 200°C, and a pressure of from 0.5 to 100 bar, in solution, in suspension or in the gas phase, in the presence of a catalyst, wherein the catalyst comprises

new

(A) at least two metallocenes as transition-metal components and an aluminoxane of the formula II



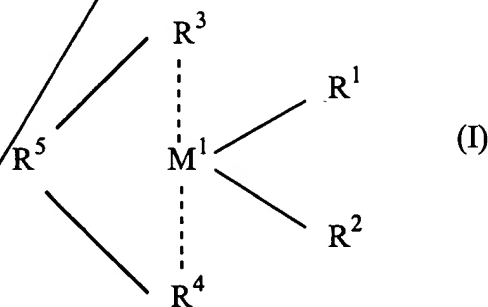
for the linear type and/or of the formula III



for the cyclic type, where in the formulae II and III, the radicals R may be identical or different are a C₁-C₆-alkyl group, a C₁-C₆-fluoroalkyl group, a C₆-C₁₈-aryl group, a C₆-C₁₈-fluoroaryl group or hydrogen, and n is an integer from 0 to 50, and the aluminosiloxane component may additionally contain a compound of the formula AlR₃, or

(B) at least two metallocenes as transition-metal components and a salt-like compound of the formula R_xNH_{4-x} or of the formula $R_3PHBR'_4$ wherein x is 1, 2 or 3, R is identical or different and is alkyl or aryl, and R' is aryl, which may also be fluorinated or partly fluorinated,

where the transition-metal component used comprises at least two metallocenes of the formula I:



in which

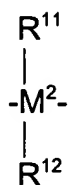
M^1 is Zr or Hf,

R^1 and R^2 are identical or different and are a hydrogen atom, a C_1 - C_{10} -alkyl group, a C_1 - C_{10} -alkoxy group, a C_6 - C_{10} -aryl group, a C_6 - C_{10} -aryloxy group, a C_2 - C_{10} -

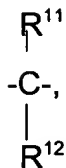
alkenyl group, a C₇-C₄₀-arylalkyl group, a C₇-C₄₀-alkylaryl group, a C₈-C₄₀-arylalkenyl group, or a halogen atom,

R³ and R⁴ are identical or different and are a monocyclic or polycyclic, unsubstituted or substituted hydrocarbon radical, together with the metal atom M¹, can form a sandwich structure,

R⁵ is



or



where R¹¹, R¹² and R¹³ are identical or different and are a hydrogen atom, a halogen atom, a C₁-C₁₀-alkyl group, a C₁-C₁₀-fluoroalkyl group, a C₆-C₁₀-aryl group, a C₆-C₁₀-fluoraryl group, a C₁-C₁₀-alkoxy group, a C₂-C₁₀-alkenyl group, a C₇-C₄₀-arylalkyl group, a

C₈-C₄₀-arylalkenyl group or a C₇-C₄₀-alkylaryl group, or R¹¹ and R¹² or R¹¹ and R¹³, in each case together with the atoms connecting them, form a ring,

M² is silicon or germanium,

R⁸ and R⁹ are identical or different and are as defined for R¹¹ and

m and n are identical or different and are zero or 1.

Substantive
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~~18. The process as claimed in claim 17, wherein the process comprises the direct polymerization of propylene or copolymerization of propylene with ethylene, 1-butylene, 1-hexene, 4-methyl-1-pentene, 1-octene, norbornene and/or norbornadiene.~~

19. The process as claimed in claim 17, wherein R¹ and R² are identical or different and are a C₁-C₁₀- alkyl group, a C₁-C₁₀-alkoxy group, a C₆-C₁₀-aryl group, a C₆-C₁₀-aryloxy group or halogen.

~~20. The process as claimed in claim 17, wherein said polyolefins are two different polypropylenes.~~

21. The process as claimed in claim 20, wherein said two different metallocenes are rac-dimethylsilyl(2-methyl-1-indenyl)₂ZrCl₂ and rac-dimethylsilyl(indenyl)₂HfCl₂.

SUB
127 22. The process as claimed in claim 20, wherein said two different metallocenes are rac-phenylmethylsilyl(2-methyl-1-indenyl)₂ZrCl₂ and rac-dimethylsilyl(2-methyl-4-phenyl-1-indenyl)₂ZrCl₂

SUB
F27 23. The process as claimed in claim 20, wherein said two different metallocenes are phenylmethylsilyl(indenyl)₂HfCl₂ and rac-dimethylsilyl(2-methyl-4-phenyl-1-indenyl)₂ZrCl₂.

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127 24. The process as claimed in claim 17, wherein R¹ and R² are identical or different and are a hydrogen atom, a C₁-C₃- alkyl group, a C₁-C₃-alkoxy group, a C₆-C₈-aryl group, a C₆-C₈-aryloxy group, a C₂-C₄-alkenyl group, a C₇-C₁₀-arylalkyl group, a C₇-C₁₂-alkylaryl group, a C₈-C₁₂-arylalkenyl group, or chlorine
R¹¹, R¹² and R¹³ are identical or different and are a hydrogen atom, a C₁-C₄- alkyl group, CF₃ group, a C₁-C₄-alkoxy group, a C₆-C₈-aryl group, pentafluorophenyl group, a C₂-C₄-alkenyl group, a C₇-C₁₀-arylalkyl group, a C₇-C₁₂-alkylaryl group, a C₈-C₁₂-arylalkenyl group, or R¹¹ and R¹² or R¹¹ and R¹³, in each case together with the atoms connecting them, form a ring.

D 25. The process as claimed in claim 17, wherein R¹ and R² are identical and are methyl or chlorine,
R⁴ and R³ are indenyl, cyclopentadienyl or fluorenyl, where these ligands may carry additional substituents as defined for R¹¹, R¹² and R¹³.

26. ~~The process as claimed in claim 17, wherein said polyolefins are two different polypropylenes.~~

27. The process as claimed in claim 17, wherein said metallocenes are chiral metallocenes. - -

REMARKS

The applicants respectively request reconsideration in view of the Amendment and following remarks. Support for newly added claim 17 can be found in the specification at page 12, lines 1-10, examples 6 and 17 and in claim 12. Support for newly added claims 18 can be found in the specification at page 12, lines 27-29. Support for newly added claim 19 can be found in the specification at page 6, lines 2-9. Support for newly added claim 20 can be found in the examples. Support for newly added claim 21 can be found in example 6. Support for newly added claim 22 can be found in example 7. Support for newly added claim 23 can be found in example 8. Support for newly added claims 24 and 25 can be found at pages 6 and 7 of the specification. Support for newly added claims 26 and 27 can be found in the examples. Claims 15 and 17-27 are now in this case.

The claims in the parent application were rejected under 35 USC §102(b) as anticipated by or, in the alternative, under 35 USC §103(a) as obvious over